

## Can I use EEE switches (Energy Efficient Ethernet or 'Green Ethernet') in my Dante network?

Short answer: no.

EEE (Energy Efficient Ethernet) is a technology that reduces switch power consumption during periods of low network traffic. It is also sometimes known as Green Ethernet and IEEE802.3az.

Although power management should be negotiated automatically in switches that support EEE, it is a relatively new technology, and some switches do not perform the negotiation properly. This may cause EEE to be enabled in Dante networks when it is not appropriate, resulting in poor synchronization performance and occasional dropouts.

Therefore we strongly recommend that:

1. If you use managed switches, ensure that they allow EEE to be disabled. Make sure that EEE is disabled on all ports used for real-time Dante traffic.
2. If you use unmanaged switches, do not use Ethernet switches that support the EEE function, because you cannot disable EEE operation in these switches. Guidelines for selecting switches are found on the Audinate website at the following link:

<https://www.audinate.com/resources/networks-switches>

Examples of unmanaged switches that have Energy Efficient Ethernet, which we do not recommend using with Dante are listed below:

### Rosewill

- Rosewill RC-415 10/100/1000Mbps 5-Port Gigabit Green Ethernet
- Rosewill RC-416 10/100/1000Mbps 8-Port Gigabit Green Ethernet
- Rosewill RC-409LX 10/100/1000Mbps 5-Port Gigabit Switch
- Rosewill RC-410LX 10/100/1000Mbps 8-Port Gigabit Switch
- Rosewill RGS-1016 - 16-PORT 10 / 100 / 1000 MBPS Gigabit Rackmount Switch
- Rosewill RGS-1024 - (RNSW-11001) - 24-PORT 10 / 100 / 1000 MBPS Rackmount Switch

### TRENDnet

- TRENDnet TEG-S81g (Version v2.0R) Unmanaged 10/100/1000Mbps 8-Port Gigabit GREENnet Switch
- TRENDnet TEG-S82g (Version v2.0R) Unmanaged 10/100/1000Mbps 8-Port Gigabit GREENnet Switch
- TRENDnet TEG-S16DG (Version v1.1R) Unmanaged 10/100/1000Mbps 16-Port Gigabit GREENnet Switch
- TRENDnet TEG-S16G Unmanaged 10/100/1000Mbps 16-Port Gigabit GREENnet Switch
- TRENDnet TPE-TG80G (Version v2.1R) Unmanaged 10/100/1000Mbps 8-Port Gigabit GREENnet PoE+ Switch

### ASUS

- ASUS GX-D1051 V3 Unmanaged 10/100/1000Mbps 5-Port Gigabit Desktop Switch with Green Network
- ASUS GX Series GX-D1241 V3 Unmanaged 10/100/1000Mbps 24-Port Gigabit Switch with Loop Detection Function
- D-Link DGS-105 Unmanaged 10/100/1000Mbps 5-Port Gigabit Switch
- D-Link DGS-1016A 16-Port Unmanaged Gigabit Switch

- D-Link DGS-1024A Unmanaged 10/100/1000Mbps 24-Port Unmanaged Gigabit Switch
- EDIMAX GS-1016 Unmanaged 10/100/1000Mbps 16-Port Gigabit Rackmount Switch
- EDIMAX GS-1026 10/100/1000Mbps 24 x Gigabit Ports w/ 2 SFP Slots Rackmount Switch

#### **LINKSYS**

- LINKSYS LGS116 Unmanaged 10/100/1000Mbps 16-Port Gigabit Switch
- LINKSYS LGS108P Unmanaged 10/100/1000Mbps 8-Port Gigabit PoE Switch
- LINKSYS LGS124 Unmanaged 10/100/1000Mbps 24-Port Gigabit Switch
- LINKSYS LGS116P Unmanaged 10/100/1000Mbps 16-Port Gigabit PoE Switch
- LINKSYS LGS124P Unmanaged 10/100/1000Mbps 24-Port Gigabit PoE Switch

#### **SMC**

- SMC GS805 (Project Only) MSO Solution IEEE 802.3az Energy Efficient Ethernet Support
- SMC GS1601 16-Port 10/100/1000 Mbps Unmanaged Switch IEEE 802.3az Energy-Efficient
- SMC GS2401 24-Port 10/100/1000 Mbps Unmanaged Switch Green Ethernet Support IEEE

#### **HP 1410 Switch Series**

- 1410-8G Switch (J9559A)
- 1410-16G Switch (J9560A)
- 1410-24G-R Switch (JG708A)
- 1410-24G Switch (J9561A)
- 1410-8 Switch (J9661A)
- 1410-16 Switch (J9662A)
- 1410-24 Switch (J9663A)
- 1410-24-R Switch (JD986B)
- 1410-24-2G Switch (J9664A)

#### **Cisco SG100 Small Business Switch Series**

- SG100D-05 5Port Gigabit Desktop Switch
- SG100D-08 8 Port Gigabit Desktop Switch
- SG100D-08P 8 Port PoE Gigabit Desktop Switch
- SG100-16 16 Port Gigabit Switch
- SG100-24 24 Port Gigabit Switch with 2 Combo Mini-GBIC Ports
- SG102-24 Compact 24 Port Gigabit Switch with 2 Combo Mini-GBIC Ports

#### **ZyXEL GS1100 Series 8/16/24-port GbE Unmanaged Switch**

- GS1100-8HP 8-port GbE Unmanaged PoE Switch
- GS1100-16 16-port GbE Unmanaged Switch
- GS1100-24 24-port GbE Unmanaged Switch
- GS1100-24E 24-port GbE Unmanaged Switch
- GS105B 5-Port Gigabit Ethernet Switch with Metal Housing & Green Energy Saving Technology

List updated June 24, 2016

This is not an exhaustive list, but rather a list of some switches that fall under the category of Energy Efficient Ethernet unmanaged switches. It is the responsibility of the user to verify switch compatibility.